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Character and Dealing With Laughter: The Relation of Self- and Peer-Reported Strengths of
Character With Gelotophobia, Gelotophilia, and Katagelasticism

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Abstract

It was hypothesized that gelotophobia (the fear of being laughed at), gelotophilia (the joy in being laughed at), and katagelasticism (the joy in laughing at others) relate differently to character strengths. In Study 1 ($N = 5,134$) self-assessed gelotophobia was primarily negatively related to strengths (especially to lower hope, zest, and love) while only modesty yielded positive relations. Gelotophilia demonstrated mainly positive relations with humor, zest, and social intelligence. Katagelasticism existed widely unrelated from character strengths with humor demonstrating the comparatively highest coefficients. Study 2 consisted of $N = 249$ participants who provided self- and peer-ratings of strengths and self-reports on the three dispositions. The results converged well with those from Study 1. When comparing self- and peer-reports, those higher in gelotophobia under-estimated and those higher in gelotophilia over-estimated their virtuousness while those higher in katagelasticism seemed to have a realistic appraisal of their strengths. Peer-rated (low) hope and modesty contributed to the prediction of gelotophobia beyond self-reports. The same was true for low modesty, creativity, low bravery, and authenticity for gelotophilia and for low love of learning regarding katagelasticism. Results suggest that there is a stable relation between the way people deal with ridicule and laughing and their virtuousness.

Keywords: character strengths; gelotophobia; gelotophilia; humor; katagelasticism; peer-report; positive psychology; virtue.

Character and Dealing With Laughter: The Relation of Self- and Peer-Reported Strengths of Character With Gelotophobia, Gelotophilia, and Katagelasticism

Although humor and laughter are typically being studied in relation to positive outcomes (see Martin, 2007; Ruch, 2008), there has been some interest in the study of the “dark side” of humor and laughter. Specifically, the effects of *fearing to be laughed at* have attracted growing interest. There is ample empirical evidence that there are people, so called gelotophobes, who extremely fear being laughed at (Ruch & Proyer, 2008ab; Titze, 2009). They misperceive laughter- and humor-related stimuli (as being aversive); feel discomfort when being confronted with laughter, and display high sensitivity toward the laughter of others. Ruch and Proyer (2008a) see the fear of being laughed at as an individual differences phenomenon at a sub-clinical level and propose a dimensional view of the variable ranging from “no fear” to “extreme” expressions.

Ruch and Proyer (2009) introduced two further dispositions in the way people deal with ridicule and being laughed at; namely, *gelotophilia* (the joy of being laughed at) and *katagelasticism* (the joy of laughing at others). The prototypic gelotophilic person enjoys making others laugh at him/her. Those high in gelotophilia actively seek and establish situations in which they can be laughed at. They do not refrain from sharing embarrassing situations or shameful experiences of their own with others in order to make them laugh. The prototypic katagelasticist enjoys laughing *at* others and thinks that this is part of daily life. Those who do not like being laughed at should just fight back. Those high in katagelasticism seek and establish situations in which they can laugh at others. Ruch and Proyer (2009) developed a subjective measure for the three dimensions, which allows testing an individual's inclination to each of the three dispositions (the PhoPhiKat-45). Ruch and Proyer (and others in later studies) report negative relations between gelotophobia and gelotophilia, positive

relations between gelotophilia and katagelasticism (both between .30 to .50 across different samples), and zero-correlations between gelotophobia and katagelasticism.

The three dispositions have already been studied within the framework of positive psychology, the study of what is good in people and what enables flourishing (Seligman & Csikszentmihalyi, 2000). The most comprehensive study thus far (Proyer & Ruch, 2009a) used Peterson and Seligman's (2004) *Values in Action* (VIA) classification of twenty-four strengths of character and six virtues. Character strengths are morally positively valued personality characteristics that contribute to the good life of people. They are the processes and mechanisms which enable the practice of a virtue (e.g., pursuing love of learning, curiosity, or creativity for practicing wisdom).

Proyer and Ruch (2009a) tested 346 adults with a measure for gelotophobia (Ruch & Proyer, 2008a) and the *Values in Action Inventory of Strengths* (VIA-IS; Peterson, Park, & Seligman, 2005). Participants collected peer-ratings on their strengths from two acquaintances. With the exception of modesty, gelotophobia was negatively correlated with self-reported virtuousness (19/24 strengths). The numerically largest negative coefficients were found for hope, curiosity, bravery, love, and zest. However, self-ratings were typically lower among the gelotophobes than the peer ratings, suggesting that gelotophobes *underestimate* their virtuousness in comparison with the evaluation from knowledgeable others. This was particularly true for love, teamwork, fairness, authenticity, and social intelligence.

Greater fear of being laughed at correlated even positively with peer-reported modesty, prudence, open-mindedness, appreciation of beauty and excellence, and spirituality (religiousness). The findings are in line with other studies showing gelotophobes' underestimation of their *intellectual* (Proyer & Ruch, 2009b) and *humor creation* abilities (Ruch, Beermann, & Proyer, 2009). Nevertheless, knowledgeable others see strengths in

gelotophobes—mainly those related to the virtue of temperance (e.g., modesty). At this point, it should be emphasized that it is not argued that the peer-reports are more “correct” than the self-reports per se, but rather they help reveal whether there are differences in the way people see themselves and how others perceive them. Differences can help for a better understanding of the nature of not just gelotophobia but gelotophilia and katagelasticism as well. Finally, it should be noted that the inclusion of peer-reports also helps dealing with biases, which may lie in the common method used for data collection (i.e., reduction of method bias) when working with self-reports only (see e.g., Campbell & Fiske, 1959; Eid & Diener, 2006; McCrae, 1982).

This study has not yet been replicated and there are no data on the relation of strengths and gelotophilia and katagelasticism. It was expected that greater levels of gelotophilia are associated with higher ratings of virtuousness relative to judgments of peers about them. The idea is that this can be interpreted as an *over*-estimation of the virtuousness of highly gelotophilic people. This is based on the description of the prototypic gelotophilic provided by Ruch and Proyer (2009) but also on research. For example, Renner and Heydasch (2010) found that those higher in gelotophilia endorse a histrionic self-presentation style, which manifests itself in explicit As-If-behaviors (i.e., perceiving daily situations as opportunities for role playing; using ironic remarks up to dramatic performances) in interaction situations, which are not meant seriously. Also, there is evidence toward greater feelings of superficial charm and grandiosity among those higher in gelotophilia (Proyer, Flisch, Tschupp, Platt, & Ruch, 2012), which may relate to a more global positive self-evaluation. A positive relation with most of the strengths (except for those addressing temperance) was expected for gelotophilia. Based on theoretical reasoning, we expected that *humor* would be the most indicative strength regarding the correlations with gelotophilia. Peterson and Seligman (2004) define the strength of humor as the ability/tendency to cheer

up others and to use humor for inducing positive emotions in others. Ruch and Proyer (2009) argue that the prototypical gelotophilic person enjoys making others laugh, which can be seen as a way of inducing positive emotions. Those high in gelotophilia should be good fun to be with and engage in an active and lively way of living and, therefore, endorse strengths like zest or strengths assigned to the virtue of humanity (love, kindness, and social intelligence).

It was further hypothesized that there would be correlations closer to zero between katagelasticism and character strengths. Ruch and Proyer (2009) define the behavior of prototypic katagelasticists toward others as rude, almost antisocial, and as limit exceeding (even be willing to hurt others) when laughing at them (see Proyer, Flisch et al., 2012). Katagelasticism correlates with self-ratings of cold-heartedness (Proyer & Ruch, 2010; Ruch & Proyer, 2009), which may finally lead to low self-rated virtuousness or being unconcerned with strengths. Numerically lowest relations were expected for the strengths of fairness, kindness, prudence, self-regulation, social intelligence, or teamwork. However, as those high in katagelasticism enjoy making jokes and funny remarks, they are expected to perceive themselves as being humorous. Since katagelasticistic behavior should be comparatively easy to observe in practice, a good convergence between self- and peer-ratings was expected.

Aims of the Present Study

The main aim of the present study was twofold: (a) a replication of the findings by Proyer and Ruch (2009a) on the relations between virtuousness and gelotophobia; and (b) the extension of the study design to include gelotophilia and katagelasticism. For achieving these aims, two studies were conducted. Study 1 aims at a replication and first evaluation of the relations between the three dispositions toward ridicule and being laughed at and character strengths. Study 2 extends findings from study 1 by also including peer-rated character strengths.

Study 1

Method

Participants. The sample consisted of 5,134 participants (1,317 men, 3,817 women; 18 to 82 years, $M = 39.3$, $SD = 13.0$). They were well-educated with 58% having an university degree, 22% a compulsory education, 12% a baccalaureate, 8% an apprenticeship, and 0.3% had not completed a compulsory education. Forty-six percent were married or in a relationship and living together, 40% were single, 13% divorced, and 1% widowed.

Instruments. The *PhoPhiKat-45* (Ruch & Proyer, 2009) consists of 45 items for assessing *gelotophobia* (sample items are “When others laugh in my presence I get suspicious”; “When strangers laugh in my presence I often relate it to me personally”, and “It takes me very long to recover from having been laughed at”), *gelotophilia* (“When I am with other people, I enjoy making jokes at my own expense to make others laugh”; “I do not hesitate telling friends or acquaintances something embarrassing or a misfortune that happened to me, even at the risk of being laughed at”, and “There is no difference for me whether people laugh at me or laugh with me”), and *katagelasticism* (“I enjoy exposing others and I am happy when they get laughed at”; “Often, disputes emerged because of funny remarks or jokes that I make about other people”, and “If it is for entertaining other people it is justified to make jokes or funny remarks that might be painful or mean about other people”; 15 items each). Answers are given on a 4-point answer format from 1 (*strongly disagree*) to 4 (*strongly agree*). The scale proved to be reliable (alpha-coefficients $\geq .84$) and stable (e.g., $\geq .73$ over six months; Ruch & Proyer, 2009). For scoring of the *PhoPhiKat-45*, mean scores need to be computed for each of the three scales. It is the standard instrument in this area and is used widely in research (e.g., Proyer, Platt, & Ruch, 2010; Renner & Heydasch, 2010; Samson, Huber, & Ruch, 2011). Alpha-coefficients in this sample were .87 (*gelotophobia*), .85 (*gelotophilia*), and .80 (*katagelasticism*).

The *Values in Action Inventory of Strengths* (VIA-IS; Peterson et al., 2005; German version by Ruch et al., 2010) consists of 240 items that assess 24 character strengths on a scale from 1 (*very much unlike me*) to 5 (*very much like me*). A sample item is “I am never too busy to help a friend” (kindness). The German version of the VIA-IS demonstrated a high nine-month test-retest correlation (median = .73) and reliability (internal consistency median = .77). The VIA-IS is used widely and its validity is well established (e.g., Park & Peterson, 2010; Proyer, Gander, Wyss, & Ruch, 2011). Alpha coefficients in this sample were $\geq .71$ (median = .78).

Procedure. Participants were tested via an online platform, which is hosted by an institution of higher education. It offers questionnaires for free use and personalized feedback (e.g., character strengths, personality, or well-being). The website is advertised via media coverage, on the institutions’ website, or via presentations at special occasions (e.g., at university programs for the elderly or at adult education centers). Although collecting data via the Internet has been criticized (e.g., sampling biases) there is empirical evidence that it is comparable to other ways of collecting data (Gosling, Vazire, Srivastava, & John, 2004). We followed current standards in Internet-delivered testing (Coyne & Bartram, 2006).

Results

Preliminary analyses. Mean scores, standard deviations, skewness, and kurtosis were computed. All scales were normally distributed. Gelotophobia tended to increase with younger age and katagelasticism increased with younger age and was associated with male gender. Curiosity, self-regulation, gratitude and religiousness also increased with age (r s between .16 and .20, $p < .001$). However, none of the correlation coefficients with demographics exceeded an $r^2 = .06$. Nevertheless, for considering a potential impact, partial correlations controlling for age and gender were computed in the subsequent analyses. The educational level did not vary with any variable tested (highest $r^2 = .02$).

If comparing mean scores to those in the construction articles of the instruments, all means were highly comparable for the three dispositions toward ridicule and being laughed at; gelotophobia ($M = 1.97$, $SD = 0.54$), gelotophilia ($M = 2.52$, $SD = 0.52$), and katagelasticism ($M = 2.03$, $SD = 0.46$). Means were numerically higher in the VIA-IS than in the construction sample for most of the strengths; they ranged between $M = 2.96$ ($SD = 0.91$; religiousness) and $M = 3.99$ ($SD = 0.53$; curiosity). However, the differences did not exceed half of a standard deviation across any of the strengths with the exception of love of learning, which was higher in this sample.

Dispositions toward ridicule and being laughed at and character. Partial correlations (controlling for age and gender) were computed between the PhoPhiKat-45 and the VIA-IS-scales (Table 1). As suggested by Park, Peterson, and Seligman (2004), correlations with the rank ordered character strengths were also computed to reduce potential effects of social desirability.

 Insert Table 1 about here

Table 1 shows that gelotophobia was negatively related to 22 out of the 24 character strengths (median = $-.21$), gelotophilia yielded mostly (except for three strengths) positive correlations (median = $.16$), and katagelasticism existed widely independent of character strengths (median = $-.11$). Primarily, greater fear of being laughed at correlated with lower zest, hope, bravery, love, humor, social intelligence, and curiosity (r s between $-.32$ and $-.40$, $p < .001$). Only modesty was positively correlated. In contrast, only modesty, prudence and self-regulation were *negatively* correlated with gelotophilia (all $r^2 \leq .02$). Humor ($r^2 = .28$), zest, social intelligence, creativity, bravery, love, kindness, hope, and gratitude demonstrated the numerically highest correlation coefficients (r s between $.21$ and $.53$, $p < .001$).

Katagelasticism could be least well described in terms of character strengths. Four strengths exceeded an $r^2 = .04$ (i.e., forgiveness, teamwork, modesty, and prudence; r s between $-.22$ and $-.30$, $p < .001$) and only humor yielded a positive correlation coefficient but its size was practically negligible ($r^2 = .02$).

The analysis of rank ordered strengths helped deriving a clearer pattern of the relations. Higher gelotophobia was associated with lower hope, zest, love, humor, bravery, and curiosity but higher modesty and prudence. The latter may be considered as the indicative strength regarding its relation with gelotophobia. For gelotophilia, modesty, prudence, and self-regulation were of comparatively lower importance. Humor emerged as the core strength regarding its relation with gelotophilia ($r^2 = .23$). Higher katagelasticism was associated with higher humor, bravery, and creativity but forgiveness and fairness to a lesser degree.

Discussion

This is the first study to examine the relations between three dispositions toward ridicule and being laughed at and virtuousness. As in Proyer and Ruch (2009a), gelotophobia was mainly negatively associated with strengths; specifically for hope, humor, zest, bravery, love, social intelligence, and curiosity. The core strengths associated with gelotophobia were modesty and prudence, which are assigned to the virtue of temperance (protecting people from excess; Peterson & Seligman, 2004). This study, however, does not allow commenting on the causality—i.e., whether gelotophobes develop prudence and modesty as a strength because of their fear or whether they develop a fear because they exaggerate prudence (i.e., prudishness/stuffiness; Peterson, 2006) and modesty (i.e., self-deprecation; Peterson, 2006).

As expected, most strengths correlated positively with gelotophilia; specifically humor, zest, social intelligence, creativity, bravery, love, kindness, hope, and gratitude. Four of them (i.e., hope, zest, gratitude, and love) are among those that are typically most

correlated with life satisfaction (i.e., hope, zest, gratitude, love, and curiosity; Park et al., 2004; Proyer et al., 2011; Ruch et al., 2010). If those high in gelotophilia are more likely to practice these strengths, this may explain their reportedly greater life satisfaction (Weibel & Proyer, 2012). Strengths like humor, love, kindness, and social intelligence point toward good social skills as those higher in gelotophilia need to know in what circumstances it may be appropriate and promising to try making others laugh at oneself.

As expected, katagelasticism was least well represented by the strengths. Many of the strengths yielded statistically significant correlation coefficients (due to the large sample size) but were practically negligible. Beyond this, rank-ordered humor, bravery and creativity were among the strengths most correlated with katagelasticism. Humor in the VIA-classification is defined as liking to laugh and joke and bringing smiles to other people (Peterson & Seligman, 2004). Those high in katagelasticism experience themselves as being humorous—despite the fact that their humor may be hurtful to others and that they may use humor for laughing *at* instead of laughing *with* others (i.e., non-virtuous use of humor). This, however, may be unnoticed by those high katagelasticism, who think that laughing at others is part of the daily life and that those who do not want to be laughed at should just fight back.

Katagelasticism increased with bravery and creativity. Those higher in katagelasticism potentially do not refrain from laughing at others irrespective of the position of the person or situational circumstances, which may be brave from their point of view. Also, greater levels of creativity are needed for creating jokes, comments, and remarks about others that may elicit laughter at their costs. This may be associated with higher levels of psychoticism (Proyer & Ruch, 2010) or with a histrionic self-presentation style (Renner & Heydasch, 2010). As expected, higher katagelasticism was associated with lower expressions in temperance strengths (forgiveness, prudence, and modesty), and in fairness. However,

these findings should not be over-interpreted because of the comparatively low size of the correlation coefficients.

Based on the literature and these findings, one may conclude that the prototypical gelotophobic person sees him-/herself as being low in strengths, those high in gelotophilia as being high, and those high in katagelasticism as being unconcerned with strengths of character. Proyer and Ruch (2009a) pointed out that the self-ratings of strengths might be biased and, therefore, Study 2 also took peer-rated strengths into consideration.

Study 2

Method

Participants. Self-reports were available from 249 participants (86 men, 163 women) with a mean age of 44.2 ($SD = 13.4$). Their age ranged from 18 to 77. Most of the participants had completed a vocational training (42%), 25% had a degree from a university of applied sciences, 23% a degree from a university, 8% a baccalaureate, and 1% a compulsory education. Forty-three percent were married or in a relationship and living together, 16% in a relationship not living together, 23% were single, 16% divorced, and 2% widowed.

Peer-ratings were available from 472 persons (181 males, 291 females; $M = 50.6$, $SD = 19.4$, 18-97 years). They had known the target person for a median of 14 years (from 5 months to 64 years; 11.6% did not provide this information). Close to eighty percent indicated that they knew the target person well to very well, while the others rated their knowledge about the target person as average to well (7.6% did not provide this information). They were rather well educated with 46.2% having an academic degree (either university or university of applied sciences). Further 39.8% had a completed vocational training and 5.6% had a school-leaving diploma which would qualify them for attending a university, and others had a basic school education (6.8% did not provide information).

Instruments. As in Study 1, the PhoPhiKat-45 (Ruch & Proyer, 2009; alpha coefficients were .87, .85, and .80) and the VIA-IS were used (alpha coefficients were between .63 to .88, median = .76). Additionally, its peer-rating form (VIA-IS peer; Ruch et al., 2010) was used, which is identical with the VIA-IS but with rephrased items (e.g., “He/she is never too busy to help a friend”, kindness). Ruch et al. (2010) report satisfactory psychometric properties for the VIA-IS peer (e.g., alpha-coefficients \geq .73, median = .81). The alpha-coefficients in this sample were between .74 and .91 (median = .83).

Procedure. Participants for Study 2 were recruited for an intervention program in positive psychology. Data were from the pretest prior to the interventions. This is a re-analysis of the data from Proyer and Ruch (2009). For a sub-group of participants in this study, data on gelotophilia and katagelasticism were available that have not been reported previously. All data were collected in paper-pencil format. Participants completed the self-report instruments and collected data with the VIA-IS peer by asking two persons who know them well to fill in the form. The peer-ratings were sent directly to the investigators in a sealed envelope. The peers were informed that their ratings were kept confidentially.

Results

Preliminary analyses. All scales were normally distributed. Mean scores and standard deviations were computed for all scales, which entered the study; gelotophobia ($M = 1.85$, $SD = 0.52$), gelotophilia ($M = 2.28$, $SD = 0.49$), and katagelasticism ($M = 1.79$, $SD = 0.39$). They ranged between $M = 2.90$ ($SD = 0.79$; religiousness) and $M = 3.98$ ($SD = 0.49$; curiosity) in the VIA-IS and $M = 3.00$ ($SD = 0.65$; religiousness) and $M = 4.01$ ($SD = 0.34$; authenticity) in the VIA-IS peer. Again, these means were about comparable to what has been reported in earlier studies.

As in study 1, minor correlations with demographics were found (all $r_s \leq .23$) and, therefore, partial correlations were computed. A difference score was computed (self- minus

peer-reported strengths) and correlated with the PhoPhiKat-45. In this analysis, a positive coefficient indicates *greater* self- than peer-ratings, which may be interpreted as an overestimation of virtuousness and vice versa for negative scores. The two peer-reports were averaged or, if only one was available (in 7% of the data) it was used as the only indicator. The convergence of self- and peer-ratings was similar to what had been reported in Ruch et al. (2010); correlations were between $r = .18$ (fairness) and $r = .61$ (religiousness).

Dispositions toward ridicule and being laughed at and character. Correlations between self- and peer-rated character strengths and the three dispositions were computed (for the VIA-IS scores and the difference score). As in Study 1, rank ordered strengths were also considered (see Table 2).

 Insert Table 2 about here

Table 2 shows that, as in Study 1, character strengths were mainly negatively related to gelotophobia, positively to gelotophilia and were mostly unrelated to katagelasticism. Overall, self- and peer-reported data converged well. Gelotophobia yielded numerically lowest associations with self-reported humor, hope, bravery, curiosity, zest, and love (r s between $-.30$ and $-.40$, $p < .01$). Only modesty ($r = .14$, $p < .05$) was positively correlated with gelotophobia. The correlation coefficients of the peer-reported character strengths pointed in the same direction, but were numerically lower—yet higher positively for modesty. The difference scores turned out to be throughout negative, indicating that higher gelotophobia was associated with an *under*-estimating of virtuousness in comparison with ratings from knowledgeable others; especially for forgiveness, humor, fairness, love, bravery, social intelligence, teamwork, curiosity, and kindness. In the analysis of rank-ordered strengths, modesty, prudence, and open-mindedness were the most indicative and hope,

humor, curiosity, and bravery the least indicative strengths of gelotophobes. It was modesty, prudence and fairness and low hope in the peer-ratings.

There were mainly positive correlations between self-reported character strengths and gelotophilia; numerically highest were humor, love, bravery, zest, appreciation of beauty and excellence, and gratitude. Gelotophilia was positively related to peer-ratings of humor, creativity, and zest but negatively to peer-reported modesty. The analysis of the difference score pointed toward an *over*-estimation of the own virtuousness in relation with gelotophilia. This was particularly true for bravery, forgiveness, humor, and love. The analysis of the rank-ordered self-reported humor indicated that humor could be seen as indicative for gelotophilia while modesty and prudence were of least importance.

As in Study 1, katagelasticism was negatively related to self-reported modesty, teamwork, and to fairness while humor was not significantly related to katagelasticism. In the peer-reports, there was a negative correlation with fairness. The difference scores revealed zero-correlations, which might indicate a “*realistic*” appraisal (i.e., agreement between self- and peer-ratings). Self-reported humor was the core strength regarding the correlations with katagelasticism; no other correlation coefficient exceeded an $r^2 = .04$.

Predicting dispositions toward ridicule and being laughed at from character.

Three stepwise multiple hierarchical regression analyses were computed separately for the three dispositions (criterion) to examine the predictive value of self- and peer-reported character strengths. In a first step, gender and age entered the equation (method: *enter*). In a second step, self-reported character strengths (*stepwise*) and in a third step, peer-reported character strengths (*stepwise*) were entered. All three regressions predicted the respective criterion significantly; i.e., $R^2 = .39$; $F(11,219) = 12.87$, $p < .001$ for *gelotophobia*; $R^2 = .39$, $F(11,219) = 12.65$, $p < .001$ for *gelotophilia*; and $R^2 = .20$, $F(6,224) = 9.43$, $p < .001$ for

katagelasticism. The single steps are not reported in detail due to space restrictions but a summary of the final models is given in Table 3.

 Insert Table 3 about here

Table 3 shows, that self-reported humor was the best predictor for gelotophobia ($\Delta R^2 = .16, p < .001$), followed by (low) self-reported bravery ($\Delta R^2 = .05, p < .001$). Peer-reported (low) hope ($\Delta R^2 = .02, p < .05$) and modesty ($\Delta R^2 = .02, p < .001$) had incremental validity beyond the self-reported strengths in predicting variance in gelotophobia.

Gelotophilia was best predicted by self-reported humor ($\Delta R^2 = .20, p < .001$). Love, modesty, open-mindedness, and appreciation of beauty and excellence were also statistically significant predictors but of lesser importance (all $\Delta R^2 \leq .03$). (Low) Peer-reported modesty ($\Delta R^2 = .05, p < .001$) and creativity ($\Delta R^2 = .02, p < .05$) were also predictive.

Male gender emerged as a potent predictor of katagelasticism ($\Delta R^2 = .08, p < .001$). Furthermore, (low) self-reported modesty ($\Delta R^2 = .05, p < .001$), (low) kindness ($\Delta R^2 = .02, p < .05$), humor ($\Delta R^2 = .03, p < .01$), and (low) peer-reported love of learning ($\Delta R^2 = .02, p < .001$) were predictors.¹

General Discussion

This set of studies shows that there are robust relations between strengths of character and the way people deal with ridicule and being laughed at. One main finding was that character strengths were mostly negatively associated with gelotophobia (Proyer & Ruch, 2009), almost throughout positively related to gelotophilia, and the majority of the strengths were unrelated to katagelasticism. Concluding, the findings suggest that modesty can be seen as the core strength of gelotophobes while they do not seem to endorse humor, hope, bravery,

¹ When computing regression analyses for the data of Study 1 (not reported here), highly similar results were found for the self-reported strengths.

curiosity, zest, and love. Contrarily, humor may be the most indicative strength in relation with gelotophilia. Those higher in the joy of being laughed at also pursue strengths like love, bravery, zest, gratitude, creativity, kindness, or social intelligence. Those high in katagelasticism also endorsed humor but were found to be lower in strengths like modesty and teamwork. Beyond self-reports, peer-reported strengths (i.e., [low] hope and modesty) contributed to the prediction of gelotophobia. Similarly, low modesty, creativity, low bravery, and authenticity predicted gelotophilia as did low love of learning for katagelasticism. If comparing findings from self-reports and ratings by knowledgeable others, it is argued that there is a stable pattern of gelotophobes underestimating their virtuousness, those higher in gelotophilia overestimating their virtuousness and those higher in katagelasticism having a realistic appraisal of their strengths (realistic in the sense of a good convergence between self- and peer-reports).

The underestimation of their own potential seems to be a general pattern among gelotophobes (Proyer & Ruch, 2009ab; Ruch et al., 2009). This may be addressed by strengths-based interventions. For example, the identification of one's signature strengths and trying to use them in a new way was shown to increase well-being (Gander, Proyer, Ruch, & Wyss, 2011; Seligman, Steen, Park, & Peterson, 2005). This may also be beneficial for gelotophobes for learning more about their strengths and practice how to use them. A different approach may be tailoring interventions to those strengths that yielded particularly low levels in gelotophobes such as humor, bravery, or hope. However, motivating gelotophobes to attend a regular humor intervention (e.g., Crawford & Caltabiano, 2011; McGhee, 2010) may not be feasible, as they fear being laughed at and as they are likely to misinterpret laughter in a group (see Titze, 2009). However, there are programs in positive psychology that can be administered via the Internet, which may be more suitable for gelotophobes (e.g., Gander et al., in press; Seligman et al., 2005).

An alternative explanation for the difference in self-ratings of strengths and ratings from knowledgeable others in gelotophobes might be that peers overestimate their strengths in order to be supportive and to value even small signs of strength expressions (Proyer & Ruch, 2009a). Consequently, peers may notice already small signs of, for example, humor as a hint of humor in those with high fear of being laughed at.

Different explanations might apply for the overestimation of strengths, which was found in relation with gelotophilia. Renner and Heydasch (2010) reported an acquisitive self-presentation style for those higher in gelotophilia. This is associated with an agentic self-image of power and competence, which may pervade into overestimations. One might argue that the feedback those high in gelotophilia get from others (laughter) facilitates this impression. This study provides evidence that peers perceive those high in gelotophilia as virtuous. It is evident that they do not take themselves too seriously and this playful yet self-confident behavior could facilitate the expression of humor or even virtuousness in general.

If discussing differences in self- and peer-reports and interpreting findings in terms of over- or underestimation of virtuousness, it needs to be acknowledged that, of course, also peer-reports may be biased and it is not argued that they are more “accurate” than the self-reports. Using the judgments of peers as the comparison standard allows comparing different viewpoints. Findings suggest differences for those high in gelotophobia and gelotophilia in the way people perceive their strengths. These, however, fit well to theoretical expectations and can be interpreted within existing literature.

Katagelasticism cannot be well described in terms of character strengths. Nevertheless, lower inclinations to fairness, prudence, and modesty were evident. It is at the level of speculations whether those high in katagelasticism may benefit from strength-based interventions—or what behavioral expressions of katagelasticism may call for treatments. Fairness might be a good starting point for such interventions (e.g., relations with

psychopathic personality traits, or the liking of aggressive types of humor; Proyer, Flisch et al., 2012; Samson & Meyer, 2010). Persons with low inclination to fairness are inconsistent toward other persons and prejudiced (Peterson & Seligman, 2004). The prototypical katagelasticeist has a ‘sharp tongue’ and their joking behavior may even result in a broken friendship (Ruch & Proyer, 2009; Proyer, Flisch et al., 2012). Given this image of a katagelasticeist, it is comprehensible that peers tended to describe them as being low in fairness. It needs mentioning that initially more negative relations were expected. The comparison of self- and peer-ratings suggests that katagelasticeism is associated with a good convergence between self- and peer-rated strengths of character; yet there seem to be different kinds of people high in katagelasticeism.

One might argue that there are at least two prototypes of katagelasticeists: (a) the *friendly katagelasticeist*, who enjoys laughing at others in a witty, charming and entertaining way but who refrains from (seriously) hurting others and who is willing to take a joke on his/her own; and (b) the *coldhearted katagelasticeist*, who does not refrain from hurting others with his/her jokes and comments and who may not enjoy making others laugh at him-/herself. The difference between them is that the friendly katagelasticeist playfully laughs at others in a “safe environment” that expresses no danger of severe harassment for others (i.e., in a socially acceptable way). Contrarily, the coldhearted katagelasticeist does not refrain from humiliating others and laughing at them (i.e., in a socially unacceptable way). One might speculate that the friendly katagelasticeists are more virtuous than the coldhearted and moreover, that the call for treatments may be more evident for the latter. If such sub-groups exist they may account for the zero-correlations with character strengths as friendly katagelasticeism could be related to virtuousness but the coldhearted type most certainly would not. This, however, is subject to further investigation toward a better understanding of katagelasticeism. Case observations would be needed for testing the practical relevance of

these types. In a subsequent step, measurement questions need to be addressed. For example, differentiating between extreme groups with existing or newly developed instruments that can account for the specificities of the types.

Finally, it is important to point out that the scientific study of the three dispositions is comparatively young; e.g., the PhoPhiKat-45, the standard measure, has been introduced in 2009. While there is already a steadily growing wealth of knowledge in the field, specific topics remain understudied. For instance, developmental effects need to be studied in more detail since there are only a few studies available, which deal with the three dispositions in childhood and adolescence (see Führ, 2010; Proyer, Estoppey, & Ruch, 2012; Proyer, Neukom, Platt, & Ruch, 2012). In addition, specific personality characteristics like self-esteem deserve more attention. The question of how high or low self-esteem can shape the way people deal with laughter and ridicule or the sensitivity toward such experiences is intriguing—yet no empirical data exists regarding these relations. One might argue in (at least) two different directions; either, people who are sensitive to being laughed at take it more seriously because they have fewer cognitive resources to protect themselves, or people with high self-esteem are more sensitive because they do not want to be challenged, whereas people with low self-esteem are used to feeling bad about them. Likewise, the perceived intensity of experiences with having been laughed at and ridicule (cf. Edwards, Martin, & Dozois, 2010; Proyer, Hempelmann, & Ruch, 2009) could differ depending on a person's self-esteem. Overall, more research is needed in this area. Ongoing projects in our research group deal, for example, with the expression of the three dispositions in different age groups (also including parent-child interactions), in a cross-cultural context but also in more experimentally oriented settings involving the coding of facial expressions.

Limitations of the present studies

Although character strengths were assessed in self- and peer-reports, the three dispositions toward ridicule and laughter were not. To provide further insight into the interaction between gelotophobia, gelotophilia, and katagelasticism and virtuousness it would be interesting to investigate the view of peers. Thus, future studies should include peer-rated dispositions toward ridicule and being laughed at, as well as peer-reported character strengths. Additionally, the recruitment process for study 2 can be criticized (people interested in an intervention program from positive psychology). Although all data were collected before the interventions started, it cannot be excluded that participants differed in specific characteristics, which were not covered by the measures, used in this study (e.g., more open to experience, more agreeable, etc.). However, the high convergence of findings from studies 1 and 2 suggests that the results seem to be rather stable.

Overall, the two studies provide further insights into the nature of the three different dispositions towards ridicule and being laughed at. We were able to replicate earlier findings, and the results met the expectations on the relations between the dispositions and self- and peer-rated virtuousness. This can also be seen as a call for further research on the dispositions in the realm of concepts from positive psychology. In doing so, a more comprehensive understanding of the nature and behavioral correlates of gelotophobia, gelotophilia, and katagelasticism will be possible.

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Table 1

Partial Correlations (Controlled for Age and Gender) Between Gelotophobia, Gelotophilia, Katagelasticism and Character Strengths

	<i>Raw scores</i>			<i>Rank ordered strengths</i>		
	Pho	Phi	Kat	Pho	Phi	Kat
Creativity	-.16	.25	.07	.01	.14	.16
Curiosity	-.32	.19	-.11	-.16	.04	-.02
Open-mindedness	-.06	.01	-.04	.18	-.18	.07
Love of learning	-.17	.10	-.09	.02	-.04	.00
Perspective	-.23	.16	.00	.02	-.02	.15
Bravery	-.39	.25	.03	-.20	.12	.17
Persistence	-.20	.04	-.07	-.01	-.12	.03
Authenticity	-.15	.08	-.11	.11	-.12	.01
Zest	-.40	.27	-.06	-.26	.15	.05
Love	-.39	.25	-.11	-.23	.11	-.02
Kindness	-.21	.24	-.12	.03	.08	-.01
Social Intelligence	-.36	.27	-.04	-.14	.10	.09
Teamwork	-.18	.14	-.19	.07	-.05	-.09
Fairness	-.13	.11	-.27	.13	-.09	-.20
Leadership	-.25	.18	-.15	-.01	-.01	-.05
Forgiveness	-.25	.14	-.30	-.05	-.02	-.24
Modesty	.18	-.14	-.24	.36	-.27	-.12
Prudence	.06	-.13	-.22	.31	-.31	-.12
Self-regulation	-.12	-.05	-.16	.11	-.22	-.06
Beauty	-.03	.15	-.07	.21	.01	.04
Gratitude	-.21	.21	-.16	.01	.06	-.08
Hope	-.40	.22	-.08	-.28	.10	.00
Humor	-.38	.53	.15	-.22	.48	.28
Religiousness	-.10	.06	-.16	.03	-.04	-.12

Note. $N = 5,134$. Pho = gelotophobia, Phi = gelotophilia, Kat = katagelasticism; Beauty = Appreciation of beauty and excellence.

All correlation coefficients $> .03$ were significant at $p < .05$.

Table 2

Partial Correlations (Controlled for Age and Sex) Between Gelotophobia, Gelotophilia, Katagelasticism and Character Strengths of the VIA-Classification (for Self- and Peer-reports, Difference score, and Rank-ordered strengths)

	<i>Self-report</i>			<i>Peer-report</i>			<i>Difference score SR-PR</i>			<i>Rank Self-report</i>			<i>Rank Peer-report</i>		
	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat
Creativity	-.19**	.24**	.07	-.13*	.23**	.03	-.08	.04	.04	-.06	.10	.11	-.02	.19**	.10
Curiosity	-.34**	.18**	-.07	-.23**	.17*	-.09	-.14*	.04	.01	-.23**	.09	.00	-.18**	.16*	-.07
Open-mindedness	-.01	-.02	.02	.01	-.07	.04	-.02	.04	-.02	.21**	-.24**	.08	.13	-.16*	.10
Love of learning	-.24**	.08	-.06	-.19**	.03	-.12	-.06	.05	.05	-.11	-.06	-.02	-.14*	-.03	-.12
Perspective	-.13*	.19**	.11	-.04	-.01	.03	-.09	.17**	.08	.11	-.03	.18**	.06	-.09	.14
Bravery	-.35**	.27**	.06	-.25**	.06	-.01	-.17*	.22**	.06	-.22**	.16**	.16*	-.16*	.00	.08
Persistence	-.18**	.04	-.08	-.09	.03	-.04	-.11	.02	-.04	-.02	-.08	-.01	.02	-.04	-.01
Authenticity	-.12	.09	-.07	-.07	.01	-.08	-.05	.07	.00	.13*	-.14*	.02	.03	-.04	-.03
Zest	-.30**	.27**	-.04	-.23**	.20**	-.01	-.09	.09	-.04	-.15*	.10	.03	-.16*	.20**	.06
Love	-.30**	.34**	-.10	-.14*	.16*	-.11	-.17**	.20**	.00	-.14*	.20**	-.07	-.09	.16*	-.03
Kindness	-.24**	.24**	-.18**	-.10	.09	-.12	-.13*	.14	-.07	.02	.07	-.10	.01	.06	-.04
Social Intelligence	-.25**	.24**	.01	-.08	.06	-.01	-.16*	.17*	.01	-.03	.02	.09	.02	-.01	.11
Teamwork	-.20**	.17**	-.21**	-.05	.05	-.11	-.14*	.11	-.10	.01	-.04	-.18**	.06	-.03	-.08
Fairness	-.16*	.15*	-.20**	.06	-.06	-.14*	-.18**	.18**	-.06	.09	-.04	-.17**	.23**	-.19**	-.11
Leadership	-.23**	.23**	-.12	-.12	.08	-.09	-.10	.14*	-.03	-.01	.03	-.08	-.08	.04	-.07
Forgiveness	-.28**	.21**	-.18**	-.04	-.02	-.09	-.24**	.21**	-.10	-.11	-.01	-.14*	.05	-.11	-.07
Modesty	.14*	-.10	-.23**	.25**	-.28**	-.12	-.11	.19**	-.10	.32**	-.31**	-.19**	.26**	-.34**	-.12

(Table 2 continues)

(Table 2 continued)

	<i>Self-report</i>			<i>Peer-report</i>			<i>Difference score SR-PR</i>			<i>Rank Self-report</i>			<i>Rank Peer-report</i>		
	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat	Pho	Phi	Kat
Prudence	.06	-.06	-.13*	.06	-.13*	-.09	.00	.05	-.04	.29**	-.32**	-.10	.19**	-.24**	-.07
Self-regulation	-.12	.09	-.02	.01	-.02	.00	-.12	.10	-.02	.10	-.14*	-.01	.08	-.10	.02
Beauty	-.08	.27**	.02	-.06	.15*	-.05	-.02	.13	.06	.13	.07	.06	-.03	.10	.02
Gratitude	-.17*	.27**	-.07	-.05	.06	-.11	-.11	.19**	.02	.02	.09	-.05	.05	.03	-.07
Hope	-.36**	.19**	-.08	-.33**	.16*	-.02	-.07	.05	-.06	-.26**	.04	-.01	-.30**	.11	.04
Humor	-.40**	.45**	.10	-.20**	.25**	.06	-.22**	.22**	.05	-.26**	.35**	.21**	-.17**	.27**	.12
Religiousness	.07	.15*	.06	.10	.10	.05	-.02	.07	.03	.17**	.03	.11	.12	.05	.06

Note. $N = 207-249$. Pho = gelotophobia, Phi = gelotophilia, Kat = katagelasticism; Beauty = appreciation of beauty and excellence; SR = self-report, PR = peer-report. Rank = rank ordered character strengths.

* $p < .05$. ** $p < .01$.

Table 3

Summary of the Final Models of Hierarchical Regression Analysis for Character Strengths (Self-reported and Peer-reported) Predicting Gelotophobia, Gelotophilia and Katagelasticism (N = 231)

<i>Gelotophobia</i>				<i>Gelotophilia</i>				<i>Katagelasticism</i>			
Predictors	<i>B</i>	<i>SE B</i>	β	Predictors	<i>B</i>	<i>SE B</i>	β	Predictors	<i>B</i>	<i>SE B</i>	β
Sex	.02	.06	.01	Sex	-.01	.06	-.01	Sex	-.15	.05	-.19**
Age	.00	.00	-.03	Age	.00	.00	-.08	Age	.00	.00	-.11
Humor	-.22	.06	-.23**	Humor	.33	.06	.36**	Modesty	-.16	.05	-.21**
Bravery	-.20	.07	-.20**	Love	.17	.06	.18**	Kindness	-.20	.06	-.23**
Religiousness	.15	.04	.22**	Modesty	-.04	.06	-.04	Humor	.16	.05	.23**
Forgiveness	-.20	.06	-.21**	Open-mindedness	-.16	.06	-.15**	Love of learning PR	-.11	.05	-.15*
Open-mindedness	.22	.07	.19**	Beauty	.12	.06	.12				
Curiosity	-.16	.07	-.15*	Modesty PR	-.28	.06	-.30**				
Modesty	.05	.07	.05	Creativity PR	.20	.06	.21**				
Hope PR	-.19	.06	-.17**	Bravery PR	-.31	.09	-.24**				
Modesty PR	.15	.06	.15*	Authenticity PR	.26	.10	.18**				

Note. PR = peer-reported character strengths. Sex (1 = men, 2 = women).

* $p < .05$. ** $p < .01$.